On Track? Ensuring the Resilience of the Great Lakes Compact

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ALLIANCE FOR THE GREAT LAKES

ENSURING A LIVING RESOURCE FOR ALL GENERATIONS

www.greatlakes.org

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Dear Great Lakes Colleagues,

As governors who were actively involved in the development and approval of the Great Lakes-St. Lawrence River Water Resources Compact, it is important to reflect on the unique significance of this historic pact and why we all need to act to ensure its full implementation and effectiveness as we near the five-year anniversary of the ratification. The compact and the corresponding agreement with the Canadian provinces has provided the nexus for common water use standards in the Great Lakes region — where very little existed prior to its passage. It was ratified by all eight Great Lakes legislatures and the U.S. Congress with broad bi-partisan support, indicating a firm belief that we can both protect and promote our water-centric ecological and economic advantages.

We see three areas where the states can make critical commitments to ensure the compact's success. There is a basic need for adequate resources to perform the key roles and tasks of each state department charged with implementing the compact, as well as for the critical functions of the Compact Council and Regional Body in their administration of the pact. Second, once all state and provincial implementing legislation has been passed, it is up to the governors and their state agency staff to make these laws effective in protecting the waters of the Great Lakes watershed as envisioned under the compact. Finally, it is important that nongovernmental organizations, water users and other stakeholders continue to educate and inform state governors, legislators and agency staff, many of whom were not present during the development of these policies and thus may not have institutional knowledge of the compact and agreement.

We thank everyone in the region who is doing diligent work to protect our irreplaceable Great Lakes water resources. Likewise, we urge each state and province to fully embrace the responsibilities of oversight to protect and promote these resources under the requirements of the compact and agreement, including the critical role of the Regional Body and Compact Council.

Sincerely,

Bob Taft
Governor of Ohio (1999-2007)

James Doyle
Governor of Wisconsin (2003-11)

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Executive Summary

The Great Lakes hold about 20 percent of the world's available surface freshwater, and 84 percent of North America's surface freshwater. As a resource, the lakes and their tributaries are invaluable — providing drinking water for 40 million people and serving as the region's economic and recreational lifeblood.

Yet, the sheer vastness of the lakes belies a fragility that policy-makers, scientists and other experts have struggled to address for more than a century. With less than 1 percent of the waters of the Great Lakes renewed annually through rainfall and snowmelt, the lakes are vulnerable to misuse and depletion.

In the next 25 years, the world will need at least 55 percent more freshwater than is now available if it is to satisfy the thirst of the growing global population. And thirst is not just a Third-World problem. Communities around the United States are fast outgrowing their water supplies. Texas recently sued Oklahoma for water rights in a case that went all the way to the U.S. Supreme Court; California and Nevada have for years been locked in epic battles over water.

Recognizing growing threats in the form of harmful water diversions and exports to places outside the Great Lakes Basin, as well as overuse and mismanagement of water within the basin, the region's leaders spent the last decade crafting a historic pact to safeguard the sustainability of the world's largest surface freshwater system.

Congress unanimously approved and President Bush signed the Great Lakes-St. Lawrence River Basin Water Resources Compact into law in October 2008. The eight-state water management pact is a first-of-its kind model for a consensus-based, basin-wide approach to decisions about how much and how far away Great Lakes water can be used.

Regional adherence to the policies outlined in the compact was expected to provide a strong and essential legal defense against water withdrawals and diversions that could endanger the lakes' ecology. The compact has yet to face a legal challenge. Still, on the fifth anniversary of its passage, questions remain about how to ensure the compact's long-term strength and resilience.

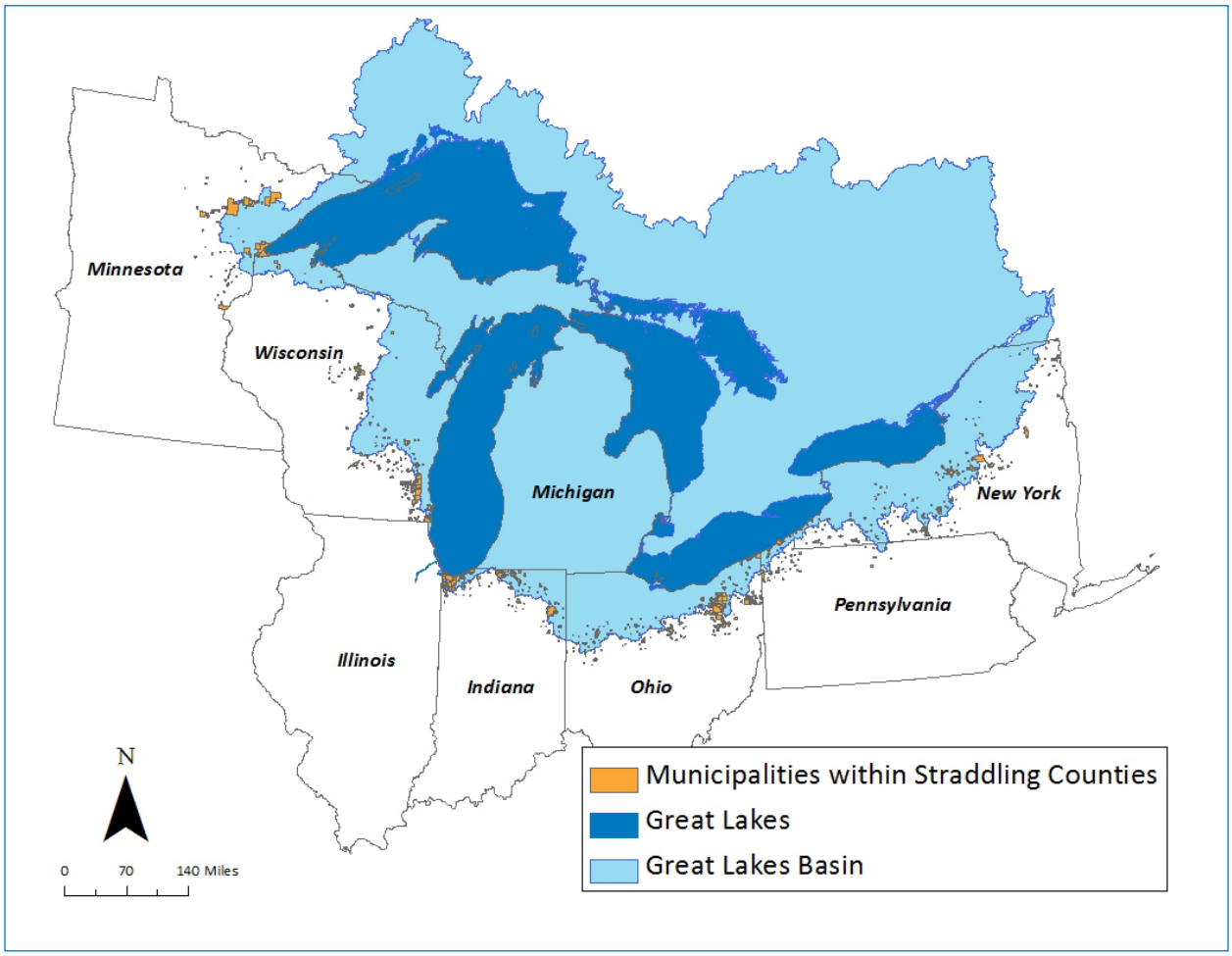
The eight Great Lakes governors who collectively wrote and unanimously endorsed the pact deliberately left it to the states to devise their own rules of implementation for in-state water use. Since the compact's adoption, the Great Lakes states have developed water use standards that are much improved from what existed before, though many lack proactive policies designed to protect and nurture water sustainability. Meanwhile, the Great Lakes-St. Lawrence River Basin Water Resources Council — the body established by the compact to make decisions about water diversions outside the basin — has not rendered binding rules for its review of diversion applications, leaving a void that may expose the pact to legal challenge and put Great Lakes water at risk.

The compact will soon face its first regional test from Waukesha, Wis., a community eligible to apply to divert Great Lakes water beyond the basin because of its location within a county straddling the Great Lakes and Mississippi River divide. The compact allows for "straddling

communities and communities within straddling counties" not currently using Great Lakes water to be granted an exception to its ban on diversions — but only if the community can prove no reasonable alternative water source exists and that the water will be returned to the basin. Absent water-tight regional implementation rules, however, this precedent-setting application could reveal deficiencies in the application process that, if unaddressed, leave the compact vulnerable to legal challenges.

Waukesha is only the first of a number of communities that may line up for Great Lakes water in the coming decades. We encourage the Great Lakes governors to consider not only the implications of reviewing the Waukesha application under current guidance, but how the decisions made during this review will inevitably shape the basis for future decisions.

The first section of this report identifies a number of communities — some similarly situated in straddling counties, others themselves straddling the border of the Great Lakes Basin — that may face the need for an alternative water supply soon and could find requesting Great Lakes water a sensible prospect in the coming decade.



Our methodology focused on these criteria: 1) Historic and projected population growth, 2) Proximity to water supply sources, 3) Drinking water quality violations, and 4) Current capacity of the community's water supply system. Based on these factors, we identify eight locations that may follow Waukesha's lead as the "thirstiest" in the coming years.

This list is representative, but not definitive, as circumstances may change to boost or lessen a community's likelihood of needing an alternate or additional water supply. Yet the ability

to project and anticipate future pressures on the Great Lakes enables policy-makers to craft appropriate and responsible policies for water use and conservation now, while they have the luxury to do so.

The second component of the report seeks to take advantage of a narrowing window of opportunity to fix shortcomings in the Compact Council review process; a window that will shut with the arrival of the first diversion request on its doorstep. The report analyzes Compact Council implementation deficiencies which, if not addressed, leave the application review process vulnerable to legal challenges that could reshape parts of the compact. These include:

- A lack of administrative rules, especially rules governing procedures for reviewing applications for diversions.
- Reliance on a supplemental Interim Guidance that could call into legal question decisions by the Compact Council.
- Failure of the Interim Guidance to define key terms not defined in the compact.
- Uncertainty about whether the Compact Council will follow provisions for public notice and comment on proposals, given the non-binding nature of the Interim Guidance.

Based on our findings, we urge the Compact Council to act quickly to adopt rules that address these identified shortcomings, thereby ensuring the compact's intended goal of protecting the waters of the Great Lakes in perpetuity.

Introduction

The Great Lakes are the largest surface freshwater system on the planet; they contain 84 percent of North America's surface freshwater and 21 percent of the surface freshwater worldwide[1]. More than 40 million Americans and Canadians live within the Great Lakes Basin and depend upon them for a variety of uses, including drinking water.[2] The Great Lakes are also an integral part of both the United States' and Canada's agricultural, shipping, fishing, manufacturing and tourism industries. The Great Lakes system contains 6 quadrillion gallons of freshwater. The size of the freshwater system is deceptive, however. Less than 1 percent of that water is renewable, meaning less than 1 percent of the water within the Great Lakes system is returned to the lakes via precipitation and groundwater recharge. The other 99 percent of the water within the lakes was deposited by the melting Laurentide glacier nearly 15,000 years ago.[3] Although the Great Lakes are a generous resource in size and scope, they are not infinite. Furthermore, small changes in the Great Lakes system can produce a chain of consequences, and it is often the interactions of these changes that result in cumulative impacts upon the Great Lakes ecosystems. Although the water used by the Great Lakes states and provinces is only a small percent of the lakes' total capacity, any consumption of Great Lakes water must be approached cautiously. As populations surrounding the Great Lakes increase, and as the impacts of climate change are realized and revealed in the lowering of lake levels in recent years, the stability of the lakes can no longer be guaranteed.

Diverting water from the Great Lakes has been proposed both at the national and regional levels. The 1960s to 1990s saw discussions on the role of the Great Lakes in the growing water scarcity issues of western and southern states. During the 1980s a number of policies, including the Great Lakes Charter of 1985 and the Water Resources Development Act of 1986 (WRDA 1986), were designed to prohibit large-scale diversions out of the basin[4]. Although these long distance, large-scale diversions were eventually regarded as detrimental to the Great Lakes system, the Great Lakes were still vulnerable to smaller, localized, less-regulated diversions. The Great Lakes region is water-rich compared to the country's western and southern states, yet communities located just outside the basin face the same water quality and quantity issues as more arid states. As populations grow in cities surrounding the Great Lakes, some of these communities look to the Great Lakes as the solution to local water problems — at the same time sending the lakes more troubles in the form groundwater depletion and water pollution from agriculture and industry.

A number of key policies have been drafted since the 1980s to protect the Great Lakes from such potentially harmful diversions. The Great Lakes-St. Lawrence River Basin Water Resources Compact, in particular, protects the Great Lakes against diversions — including localized diversions just outside the basin. Signed into law by President Bush in 2008, the compact bans the diversion

1 United States Environmental Protection Agency (2012). Basic information. Great Lakes National Program Office

2 Dziegielewski, Benedykt and Horrie, Mitchell G. (2010). Assessment of the Present and Future Water Use in the Great Lakes Basin, Final Report. Submitted to U.S. Army Corps of Engineers. p. 123

3 Eyles, N., Westgate, J. (1987). Restricted regional extent of the Laurentide Ice Sheet in the Great Lakes basin during early Wisconsin glaciation. *Geology*, v.15, p. 537-540

4 Annin, Peter. "Aversion to Diversion." *The Great Lakes Water Wars*. Washington: Island, 2006. p. 57-85

of Great Lakes water outside the basin, with limited exceptions, and sets standards for water use and conservation for communities within the basin. One exception to out-of-basin diversions pertains to whether the community seeking Great Lakes water is a so-called straddling community or a community located within a straddling county. A "straddling community" is one that lies partially within the basin and partially outside it; similarly, a community located within a straddling county is one located outside the basin, but within a county located partially within the basin.

This report examines conditions under which a straddling community, or a community within a straddling county, might apply for Great Lakes water. Assessing the current water uses and needs of communities surrounding the Great Lakes provides insight into the role the lakes might play as populations increase around the basin. The ability to project and anticipate the future pressures on the Great Lakes enables policy-makers to craft appropriate and responsible policies for water use and conservation. The parameters used in this report to explore a community's likelihood to apply for a diversion are:

- Historic and projected population growth rate of the community
- Proximity of the community to the Great Lakes compared to proximity to other water supply options
- Quality of the community's drinking water
- Capacity of the community's water supply system

Methodology

Communities within six of the eight Great Lake states were analyzed on the four criteria mentioned above to determine whether an application for diversion was likely. The potential for a community to apply for a diversion under the compact increases as more of these criteria are met. The list of communities in this report is in no way meant to be definitive as a community's circumstances may change to either increase or decrease its likelihood of needing an alternative or additional water supply. Many factors not discussed here affect a community's decision about whether to seek a new water supply. This list is simply to demonstrate that there exists a strong probability of need for an alternative water source in a given community within the next decade.

Even before any criteria were applied, two of the eight Great Lake states — Michigan and Illinois — were excluded from the analysis because of circumstances that made diversion applications unlikely or unnecessary. Applications from Michigan communities are improbable as nearly the entire state is within the Great Lakes Basin, meaning water Michigan withdraws from the Great Lakes is returned to the basin and thus not diverted. In the case of Illinois, a Supreme Court consent decree overrides the Great Lakes Compact in regulating diversions from the Lake Michigan basin. The consent decree was the result of a lawsuit the state of Wisconsin filed against the state of Illinois in 1922 in which Wisconsin argued that the new Chicago Sanitary and Ship Canal's diversion of water from Lake Michigan to the Chicago River was lowering lake levels, to the lakes' detriment. After decades of negotiation, the lawsuit was settled in 1967 when the eight Great Lake states agreed to limit Chicago's diversion from Lake Michigan for navigation, domestic or sanitary uses to 3,200 cubic feet per second (cfs). The decree was modified in 1980 to allow Illinois to extend domestic water use to other communities.[5]

Looking ahead, the first factors we considered in analyzing a community's potential need for Great Lakes water were current population and population growth. Communities with populations below 5,000 were eliminated from the analysis unless they received frequent water quality violations. Because the application process for a diversion is costly, there is only a small probability that these smaller communities would be financially able to pursue Great Lakes water. Within the remaining communities, we identified those that experienced double-digit population growth over the last two decades and are projected to continue growing at a similar rate.

Only those communities employing a public water supply system were included in the next step of the analysis. Water use surveys were sent to these communities to obtain information about the source of their current water supply and the daily use and peak use of their water. By comparing the capacity of the city's water supply system to the city's average daily flow, measured in millions of gallons per day (MGD), we projected whether the community's water use might exceed the capacity of the water supply system in the near future and thereby compel the community to seek alternative or additional supply sources.

In addition to water quantity, a community's water quality was also assessed. Criteria for water quality were based upon the number of maximum containment level (MCL) violations

5 Lake Michigan Diversion Supreme Court Consent Decree (1967)

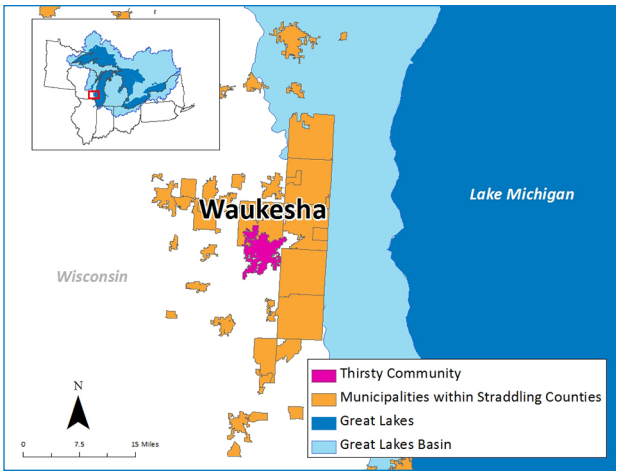
a community received since 2000. The U.S. Environmental Protection Agency sets maximum containment levels for specific substances in its National Primary Drinking Water Standards (NPDWS). An MCL violation indicates that a particular substance is present in the community's drinking water at a level that might contaminate the quality of the drinking water or become a potential health threat. MCL violations can be found in EPA's Safe Drinking Water Information System (SDWIS), which contains information about public water systems and their violations of EPA's drinking water regulations. Multiple water quality violations, especially in groundwater, could indicate a systemic problem with the community's current water supply, thus making it more likely they would need to seek an alternative supply.

Our hypothesis was that meeting one or more of the above criteria may necessitate a community to seek alternative or additional water supply sources, which could include the Great Lakes. Applying for Great Lakes water may not be cost-effective or convenient for many communities, however, because they are closer to an alternative water supply system outside the Great Lakes Basin. To this end, those communities having an abundance of alternative water supply sources nearby were eliminated from the analysis, while those that lacked access to such alternatives outside the basin were retained as they are more likely to seek Great Lakes water.

Eight communities — in addition to Waukesha, Wis., which already has applied to divert Lake Michigan water — met two or more of the criteria necessary to be considered potential applicants for diversion. Not surprisingly, the communities are located in Ohio, Indiana and Wisconsin, states in which most communities rely heavily on groundwater wells that are susceptible to water quantity and quality issues — especially as populations increase. New York and Pennsylvania did not meet the criteria, as few straddling communities exist in those states; in Minnesota, communities did not meet the criteria because of an abundance of alternative water sources there. From the narrow perspective of water volume, nine communities in three states may not seem like a substantial problem. Yet these numbers take on greater significance when considering that each application is another opportunity for a legal challenge that could recast the regulatory and legal framework supporting regional compact implementation.

Communities already seeking or showing potential for Greal Lakes diversion

The First Test: City of Waukesha, Wisconsin



The city of Waukesha is a good point of reference for evaluating the diversion potential of straddling communities around the Great Lakes. Waukesha's current water source, a deep aquifer, faces both water quantity and water quality issues. The aquifer's water levels have declined by more than 500 feet and continue to drop five-to-nine feet each year,[6] and the city faces water quality issues resulting from the depletion of its groundwater. Radium levels in Waukesha's drinking water exceed federal EPA standards; hence the city is being required to treat its current water source for radium and find a source that meets drinking water standards by June 2018.

The city submitted an application for Lake Michigan water to the Wisconsin Department of Natural Resources in May 2010. The DNR returned the application as incomplete weeks later, saying the Milwaukee suburb failed to show it has no alternative but to tap Lake Michigan water; Waukesha is in the process of revising its submission. In its application, the city lists three cities as potential Great Lakes water suppliers: Milwaukee, Racine and Oak Creek. Waukesha specifies an average of 10.9 million gallons per day as the diversion rate and 18.5 million gallons as the maximum daily diversion rate.[7] The city's application has gained significant attention, as the outcome will set a precedent for future diversion applicants and determine the threshold for conditions that warrant a Great Lakes diversion.

Communities within Straddling Counties

The following communities are not straddling the basin themselves, but are located within straddling counties, or counties that lie partially within the basin. A community within a straddling county must meet a list of conditions outlined in the compact if it is to obtain Great Lakes water. These conditions include the intended use of the water, a guarantee the water will be returned to the basin, and a guarantee that all other water supply alternatives have been considered and found infeasible. Unlike straddling communities, which must undergo regional review by the governing Great Lakes-St. Lawrence River Basin Water Resources Council for diversion proposals totaling more than 5 MGD, diversion proposals by communities within straddling counties are required to undergo regional review regardless of the size of the desired diversion.

6 Wisconsin Department of Natural Resources (2011). Notice of Complete Application and Public Hearing for a Diversion of Great Lakes Water: Waukesha, Wisconsin

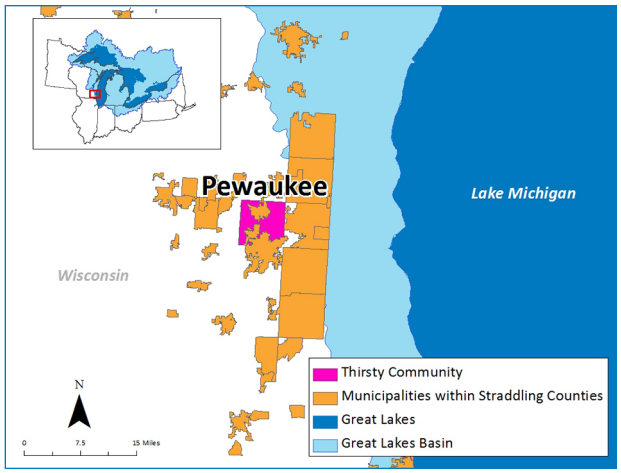
7 City of Waukesha: Great Lakes Water Application 5-20-2010

Wisconsin

Pewaukee

Looking solely at our criteria, Pewaukee's potential for diversion would be projected as probable, but not immediate. Although their utilization rate is low, Pewaukee has multiple wells that exceed allowable federal levels of radium and had 4 MCL water quality violations in 2002 as a result. Since 2002, the city has been able to resolve the radium problem by adjusting pumps and blending with water from a non-contaminated well.

It is Pewaukee's relationship to Waukesha that increases the immediacy and probability of a diversion. As a neighbor community, a portion of Pewaukee is included in the service area designated in Waukesha's diversion application. Therefore, if Waukesha's application is approved, some of Pewaukee will receive Lake Michigan water. Access to Lake Michigan water in one part of the community raises the likelihood that the remainder of the community would look to convert from groundwater to Lake Michigan water in the near future.

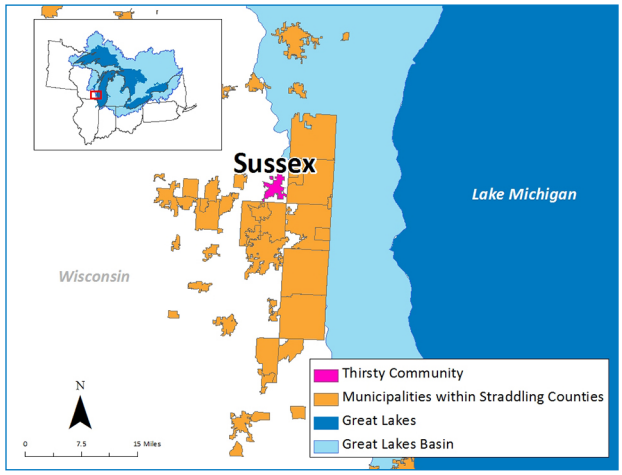


POPULATION		
1990	**2010**	**Projected 2040**
unavailable[8]	13,195	14,460[9] (↑9.6%)

WATER SUPPLY SYSTEM		
Design Capacity	**Current Usage**	**Current Utilization Rate**
6.7 MGD	1.32 MGD	19.7%

Sussex

Doubling its population in the past 20 years, Sussex has been publicized as an ideal Wisconsin community in which to raise a family (the village was ranked No. 1 in Wisconsin in Bloomberg Businessweek's 2012 "Best Place to Raise Kids" survey, and No. 3 in Milwaukee Magazine's 2011 ranking of the 50 best suburbs). Regional planners project a 61 percent growth rate for the next three decades, which will increase the village's water supply capacity utilization from the current 43 percent to 70 percent. This, combined with the fact that Sussex has had 5 MCL water quality violations since 2000 (gross alpha, excluding radon and uranium in 2000, 2001 and 2007; combined radium in 2000 and 2001) makes it probable that the village will need to seek alternative or additional supply sometime in the future.



POPULATION		
1990	**2010**	**Projected 2040**
5,039	10,518 (↑109%)	16,953 (↑61%)

WATER SUPPLY SYSTEM		
Design Capacity	**Current Usage**	**Current Utilization Rate**
2.12 MGD	.92 MGD	43.4%

8 The city of Pewaukee was not incorporated until 1999

9 Using 10-year growth rate calculated from State of Wisconsin population projections for 2020 and 2030. MCD and Municipal (MCD's crossing county lines combined) Population Projections, 2000-2030 http://www.doa.state.wi.us/docview.asp?locid=9&docid=2051

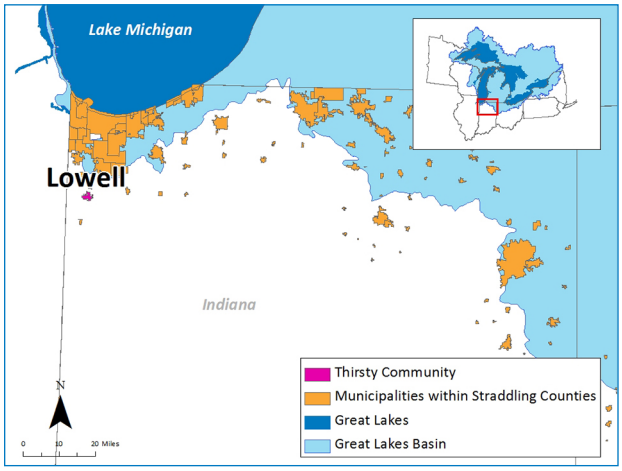
In addition, Sussex was designated for conversion from groundwater to Lake Michigan water in the Southeast Wisconsin Regional Planning Commission's 2035 water supply plan. Sussex neighbors include Menomonee Falls, the east side of which already receives Lake Michigan water, and Pewaukee which, as explained above, has the potential to receive Lake Michigan water as part of Waukesha's application.

The village's growth, limited capacity, water quality issues and proximity to Lake Michigan suppliers make it a likely candidate for a diversion application.

Indiana

Lowell

Although Lowell's population is the smallest of all the communities included, it has seen sizable growth of 44 percent in the last 20 years. This growth has put a strain on its current water system, which draws from groundwater wells and is already at 74 percent of pumping capacity on an average day, and at full capacity on some summer days and when fighting larger fires.[11] Using the projected population provided by the regional planning authority, we estimate their system to run at an 84 percent average capacity utilization by 2040. Lowell has also made known its plans to attract new business development by expanding its town borders, which will put an even greater demand on their water supply.[12] For these reasons, Lowell is currently considering its options for meeting its future water goals.



POPULATION		
1990	**2010**	**Projected 2040**
6,423	9,276 (↑44%)	10,500[10] (↑13%)

WATER SUPPLY SYSTEM		
Design Capacity	**Current Usage**	**Current Utilization Rate**
1.1 MGD	.814 MGD	74%

Lowell has a history of water supply issues. In 1987, the EPA ordered the town to address excess fluoride in its water supply (fluoride increases bone density and excess amounts can lead to significant health problems). Facing the potential of strict fines, Lowell considered options for an alternative water supply. Lake Michigan was the most appealing to residents and the town council because of its reliability and water quality. After securing an agreement with the city of Gary to supply Lake Michigan water, Lowell applied for a diversion. What the town thought would be an easy decision turned into a debate on not only the merits of their case, but on the precedent for approving an out-of-basin diversion under WRDA 1986. Ultimately, Michigan's governor cast the lone dissenting vote that would deny Lowell's diversion request. The town has since been drawing water from a new groundwater source discovered after the decision. Though the difficult and sometimes negative diversion application process may have soured Lowell from turning to Lake Michigan as its first alternative, the town may seek water from Lake Michigan in the future if no other reliable and cost-effective option is found.

10 Northwestern Indian Regional Planning Commission 2040 Regional Comprehensive Plan

11 *http://www.nwitimes.com/news/local/lake/lowell/lowell-eyes-new-concept-for-water-plant/article_61a40006-ce91-5a0e-aa02-1e3080e48886.html*

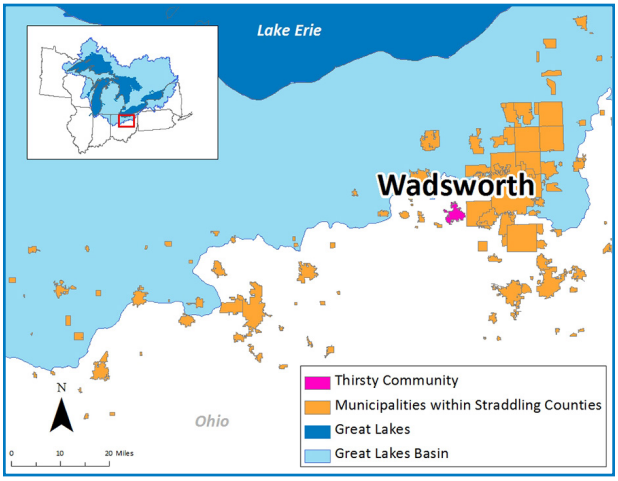
12 *http://posttrib.suntimes.com/news/lake/6477836-418/lowell-maps-out-expansive-annexation-plans.html*

As the two communities closest to Lowell — Cedar Lake (five miles) and Crown Point (nine miles) — are both within the basin, connecting to their water supply system would be considered a diversion. Cedar Lake draws its drinking water from groundwater wells and had a coliform water quality violation that resulted in a boil order in 2012. Crown Point receives Lake Michigan water through the Indiana American Water private utility company. Hebron is the next closest town (12 miles); though located outside the basin, it has experienced two coliform bacteria violations in its groundwater supply since 2000.

Ohio

Wadsworth

Wadsworth has also experienced double-digit growth within the past two decades, but the criteria that makes it most likely for an increased water withdrawal is the percent of capacity that is now utilized. The town reports it is currently utilizing 1.845 MGD, which is 60 percent of its 3.1 MGD capacity. Taking into account Wadsworth's projected population growth rate of 19 percent, we estimate its 2040 average utilization will be 2.19 MGD, or 71 percent. Wadsworth does not have any MCL water quality violations since 2000. As previously stated, however, water quantity — not quality — is the issue in Wadsworth.



POPULATION		
1990	**2010**	**Projected 2040**
15,718	21,567 (↑37%)	25,574[13] (↑19%)

WATER SUPPLY SYSTEM		
Design Capacity	**Current Usage**	**Current Utilization Rate**
3.1 MGD	1.845 MGD	60%

Although Wadsworth has neighboring communities outside the basin that could supply its water, two of these communities — Rittman and Doylestown, both four miles away — have known or possible water quality issues. In its 2011 Consumer Confidence Drinking Water Report (CCR), Rittman states that its groundwater supply has "moderate susceptibility to contamination due to the moderate sensitivity of the aquifer in which the drinking water wells are located, and the existence of several potential contaminant sources within the protection zone."[14] Doylestown's 2012 CCR includes an advisory for elevated lead levels.[15] The most likely alternative water source, in the event Wadsworth exceeds its usage capacity, are the communities of Copley or Akron. Copley is seven miles away and draws its drinking water from the city of Akron, which lies within the basin. Akron's location within the basin means that connecting to Copley would ultimately require Wadsworth to seek a diversion application. A few other small towns are located near Wadsworth, though their potential as an alternative water supply is unknown.

13 Northeast Ohio Area Coordinating Agency unofficial projection

14 http://www.rittman.com/stuff/rittman_water_report_for_web11.pdf

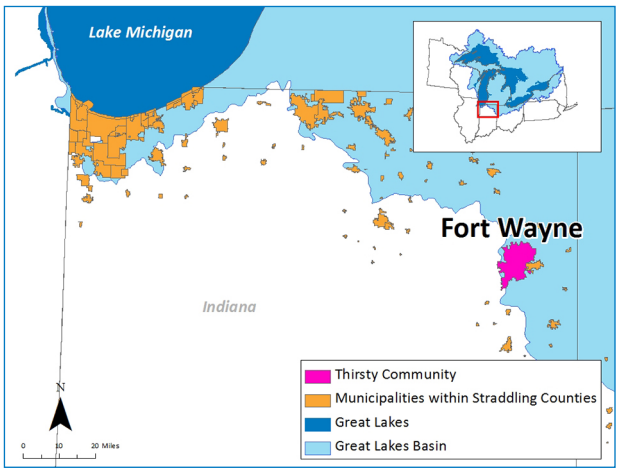
15 http://www.doylestown.com/images/dept/water-dept/2012%20ccr%20complete%20for%20web.pdf

Straddling Communities

Several straddling communities, defined as those that themselves straddle the basin line, already use Great Lakes water. Many straddling communities withdrawing Great Lakes water are allowed to do so because they were granted Great Lakes water allocations before the current legislation banning diversions. Communities using Great Lakes water prior to the compact must adhere to the standards of the 1985 Great Lakes Charter and the subsequent 1986 WRDA. The charter serves a similar purpose as the compact and also serves as the framework for the compact, but is non-binding. The following communities are allowed to receive Great Lakes water because their allocations were grandfathered. These same communities would be bound by the compact, however, if they were to seek additional water from the Great Lakes — meaning the community would need to apply for a diversion under the compact. The compact's standards are intended for new or increased withdrawals. For straddling communities, new and increased diversions totaling more than 100,000 gallons per day must meet the exception standards outlined in the compact, such as a requirement that water must be returned to the source watershed; new and increased consumptive uses of more than 5 MGD must undergo a regional review process by the Great Lakes-St. Lawrence River Water Resources Regional Body.

Fort Wayne, Indiana

Fort Wayne draws its water from surface water of the St. Joseph River. The St. Joseph River converges with the St. Mary's River to form the Maumee River, which drains into the western Lake Erie Basin. Thus, water that is used by Fort Wayne is returned to the Great Lakes Basin. Fort Wayne's current water use is governed by the Indiana Water Use Rules, rather than the Great Lakes Compact. If the city were to seek an increase in its water allocation that would result in a consumptive use of 5 MGD or more during a 90-day period, however, the city's proposal would necessitate a regional review.



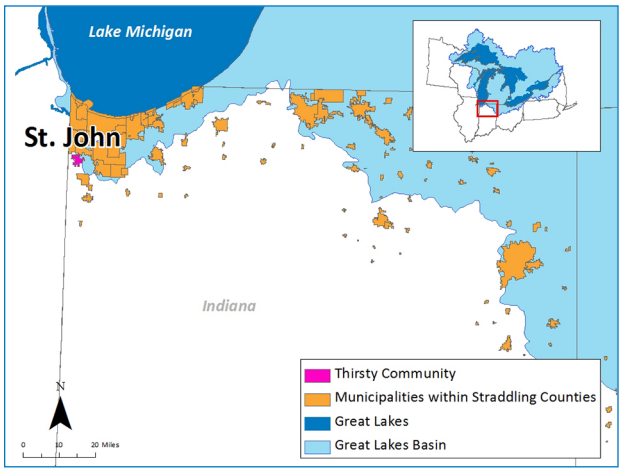
POPULATION		
1990	**2010**	**Projected 2040**
173,072	253,691 (↑47%)	.64% growth/yr[16]

WATER SUPPLY SYSTEM		
Design Capacity	**Current Usage**	**Current Utilization Rate**
72 MGD	34 MGD	47%

The area around Fort Wayne looks ripe for future development, given a 0.64 percent per year (a 20-year growth rate of 9.9 percent) growth projection for the Fort Wayne area by the Northeastern Indiana Regional Coordinating Council, and a better-than-average economic outlook (the city's metro area led the nation in job growth for a 12-month period in 2012). If this development occurs in suburbs located outside the basin, it may become advantageous for Fort Wayne to apply for a diversion to generate revenue by supplying Great Lakes water to developing communities.

16 E-mail correspondence with Jeff Bradtmiller, senior transportation planner at the Northeastern Indiana Regional Coordinating Council

St. John, Indiana



POPULATION		
1990	**2010**	**Projected 2040**
4,921	14,850 (↑202%)	22,250[17] (↑50%)

WATER SUPPLY SYSTEM		
Design Capacity	**Current Usage**	**Current Utilization Rate**
5 MGD	1.5 MGD	30%

St. John has experienced significant growth in the past 20 years. What was a town of just 5,000 in 1990 has now become a highly regarded community of more than 14,000. In its 2013 rankings, Bloomberg Businessweek named St. John "the best place to raise kids" in Indiana, giving it high marks for a family-friendly atmosphere, excellent schools and investment in parks.[18] The regional planning authority projects growth there to slow considerably; still, slower growth for St. John would be sizable for any other community. Though growth may benefit the community in many ways, it could cause water supply issues. The town is currently utilizing 30 percent of its total water capacity but, based on the population projection, we estimate capacity utilization to increase to 45 percent by 2040. Not only does population growth strain existing resources, it also brings increased land development that can adversely affect groundwater quality and replenishment.

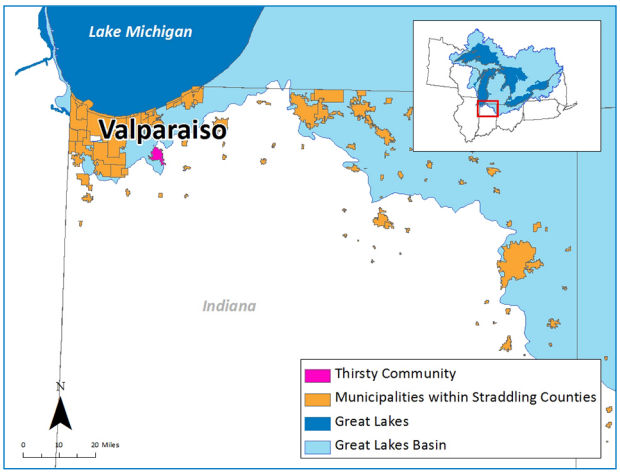
Like Lowell, the proximity of neighboring communities already drawing Lake Michigan water makes St. John a good candidate for a future diversion application. Schererville is only two miles from St. John and Crown Point is six miles away; both receive Lake Michigan water through the Indiana American Water private utility. Cedar Lake is also six miles away but, as discussed previously, it draws its water from groundwater wells that may be unable to serve such a growing demand in addition to meeting its residents' needs.

Because of St. John's status as a straddling community, an additional water withdrawal of 100,000 gallons per day or more would have to meet the compact's exception standards, including maximizing the amount of in-basin water returned to the basin and minimizing the amount out-of-basin water that is sent to the basin.

17 Northwestern Indiana Regional Planning Commission 2040 Comprehensive Regional Plan

18 *http://www.nwitimes.com/news/local/lake/st-john/st-john-is-deemed-top-place-in-indiana-to-raise/article_679c05f7-9395-5ffd-996d-e7003658c23a.html*

Valparaiso, Indiana



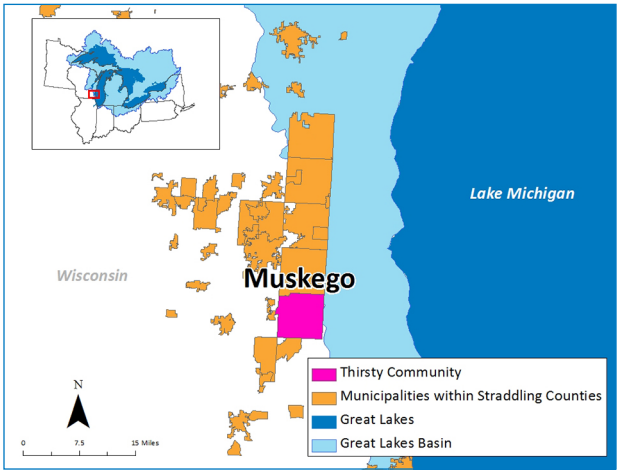
POPULATION		
1990	**2010**	**Projected 2040**
24,414	31,730 (↑30%)	41,000[19] (↑29%)

WATER SUPPLY SYSTEM		
Design Capacity	**Current Usage**	**Current Utilization Rate**
6.1 MGD	4.1 MGD	67%

Valparaiso's water supply picture is similar to that of Wadsworth, Ohio, though population growth — while significant — is not the main issue. Rather, it is the utilization of Valparaiso's current water supply that signals the potential for a Great Lakes diversion. Given the 29 percent population growth rate projected by the regional planning authority, their capacity utilization is projected to increase from its current 67 percent to 87 percent by 2040.

Valparaiso currently draws groundwater from wells and surface water from Flint Lake. Any increased supply could either come from existing groundwater or surface water sources, or by connecting to a neighboring community that is supplied by Lake Michigan. Portage, which is nine miles from Valparaiso, receives Lake Michigan water from the Indiana American Water private utility. Valparaiso's application would have to go through the Regional Body's regional review process if the additional consumptive use were to exceed 5 MGD.

Muskego, Wisconsin



POPULATION		
1990	**2010**	**Projected 2040**
16,813	24,135 (↑44%)	29,805[20] (↑23%)

WATER SUPPLY SYSTEM		
Design Capacity	**Current Usage**	**Current Utilization Rate**
8.2 MGD	.91 MGD	11.1%

Muskego straddles the basin, but does not use any Great Lakes water and did not have an allocation grandfathered into the compact. Therefore, any future consumptive use exceeding 5 MGD would require a regional review under the compact's guidelines.

With just one MCL water quality violation in 2005 and only a 13.7 percent projected 2040 capacity utilization, Muskego would not appear to be a candidate for diversion. However, two outside factors indicate that the potential for a diversion application is strong. First, Muskego is in close proximity to two communities that have or will apply for a diversion: New Berlin and Waukesha. (As a straddling community, New Berlin was eligible to receive Lake Michigan water from Milwaukee without compact approval for the portion of the town that resides within the basin. However, New

19 Northwestern Indiana Regional Planning Commission 2040 Comprehensive Regional Plan

20 Using 10-year growth rate calculated from State of Wisconsin population projections for 2020 and 2030. MCD and Municipal (MCD's crossing county lines combined) Population Projections, 2000-2030 http://www.doa.state.wi.us/docview.asp?locid=9&docid=2051

Berlin's need for additional supply for the central portion of the town that lies just west of the basin compelled it to apply for a diversion. The application was approved by the Wisconsin DNR in 2009 but was not subject to regional review.)

Second, in its 2035 regional water supply plan the Southeast Wisconsin Regional Planning Commission specifically recommended that Muskego switch to Lake Michigan water. According to a map provided in the plan, Muskego would receive the water from Milwaukee. Although the report gave no specific reason for recommending the switch to Lake Michigan water, a map showing estimates of groundwater recharge highlights an area of Muskego where the recharge is projected as low.

Implications for the Compact

Whether initiated by one of the above communities or one not identified in this report, there is a significant potential that one or more applications to divert or withdraw water from the Great Lakes will be forthcoming. Regardless of who applies and under what conditions, the stakes are high for the Great Lakes Compact. The first diversion application will be a test of whether the compact's existing rules, processes and language are solid enough to meet the regulatory and possible legal challenges it will face. Subsequent applications will test the consistency with which those rules, processes and language are applied, as well as the consistency of decisions to approve or disapprove across municipalities and states.

In light of this, the Alliance conducted a review of the compact and its supplemental Interim Guidance with respect to diversion applications to determine their fitness to support a comprehensive and defensible review process. The goal of the review was to uncover any shortcomings in the compact and Interim Guidance that weaken the council's ability to make fair and consistent decisions. Conducting the review before any applications have been submitted gives the Compact Council an opportunity to address these shortcomings and strengthen the compact before any diversion decisions must be made. The results of the review highlighted several areas that, when addressed, would provide the council with a clearly defined set of rules and process by which to make objective and consistent decisions, and would also allow for accurate evaluations of these decisions by outside parties.

Is the Compact Council Ready?

This section provides an overview of some of the legal implications of the Great Lakes-St. Lawrence River Basin Water Resources Council ("the Council") proceeding with decision-making on applications for Great Lakes water without first developing the formal rules necessary to guide them. As discussed further below, without the adoption of formal rules and procedures, a legal challenge to a Council decision regarding a diversion application could result in changes to the compact that resonate for years or decades. The Council's Interim Guidance does not impose binding requirements on the Council. The substance of the Interim Guidance is also lacking, as it does not address certain key statutory terms or require a written record of decision for Council decisions. Without a clear regulatory process in place, including agreed-upon definitions and a documented basis for Council decision-making, applicants and stakeholders will be challenged to properly participate in or evaluate Council determinations. This heightens the risk of legal challenges and a reviewing court may not defer to the Council's judgment as much as if formal rules and definitions were in place. This could, in turn, impair the long-term implementation and effectiveness of the compact. Promulgating specific, binding regulations through appropriate notice and comment that address the issues outlined below is imperative to mitigate these risks.

I. Background

In June 2010, the Council issued Interim Guidance ("the Guidance"), which is a set of "policies and procedures intended to supplement existing requirements in the Great Lakes-St. Lawrence River Basin Water Resources Compact ['the Compact']." The Guidance was not developed through a notice-and-comment rulemaking process. Moreover, the Guidance explicitly provides that "the Council reserves the discretion to deviate from these guidelines if circumstances warrant." Accordingly, while the Guidance is a helpful supplement to the Compact, there was no formal public input process supporting its development and there is no assurance that the Council will adhere to the stated provisions.

Section 7.3 of the Compact provides for judicial review of Council decisions in the D.C. District Court, but is silent on the appropriate standard of review. The Guidance does not address judicial review. It also does not define critical Compact terms of art, apparently relying on individual party states to fill in the gaps.

II. Legal Analysis

Courts will likely apply the Administrative Procedures Act ("APA" or "Act") standard of review to Council decisions made under the Compact, even though the Council would not be considered an "agency" under the Act. This standard of review tends to be highly deferential to the administrative body and most often results in courts upholding the agency's decision. However, in the absence of key regulatory definitions and clear procedures to ensure proper decision-making, a reviewing court may not defer to the administrative body, instead reversing or remanding for further review. The fact that the Council can deviate from the Guidance at its discretion calls into question Council decisions rendered and a court's willingness to provide deferential APA review.

A. The Council Is An Administrative Body Whose Decisions Are Subject to the APA

Section 2.1 of the Compact creates the Great Lakes-St. Lawrence River Basin Water Resources Council "as an agency and instrumentality of the governments of the respective Parties." Although the Council is clearly an administrative body, it likely would not be considered an "agency" for purposes of the APA, 5 U.S.C. §§ 551 *et seq*. The APA defines "agency" as "each authority of the Government of the United States, whether or not it is within or subject to review by another agency . . ." 5 U.S.C. § 551(1). As the Council is created by and composed of states, it is unlikely a court would find the Council to be an authority of the U.S. government. *See, e.g., Martha's Vineyard/Dukes County Fisherman's Assoc. v. Locke, 2011* U.S. Dist. LEXIS 105028, *12-15 (D.D.C. 2011) (holding that interstate compact agencies are not authorities of the government of the U.S. when "the entity is created by and composed of states" and thus the APA did not govern the Atlantic States Marine Fisheries Commission); *New York v. Atl. States Marine Fisheries Comm'n,* 609 F.3d 524, 533 (2d Cir. N.Y. 2010) (holding that while an interstate compact becomes federal law if it is congressionally sanctioned, it does not follow that the interstate commission is a federal agency). In holding that the Atlantic States Marine Fisheries Commission — an interstate compact council — was not governed by the APA, the court reviewed whether the "authority exercised" by the commission was "federal in nature" and whether "the contracting states understood themselves to be compacting to create a federal agency." *Atl. States Marine Fisheries Comm'n,* 609 F.3d at 533; *see also Martha's Vineyard,* 2011 U.S. Dist.

LEXIS at *14. Like the Atlantic States Marine Fisheries Commission, the Council was created by and is composed of states. Further, it governs Great Lakes water withdrawals, which is authority traditionally exercised by the states. There is no indication that the Compact states understood themselves to be "compacting to create a federal agency." The fact that the Compact was created by an interstate compact and approved by Congress does not alter this analysis. *See Atl. States Marine Fisheries Comm'n,* 609 F.3d at 532.

Even though the Council likely would not be considered an "agency" under the APA, it is likely that courts would nonetheless apply the APA agency standard of review for Council decisions made under the Compact. As mentioned, the Compact provides for judicial review of Council decisions in federal court, but is silent on the standard of review to be applied. When judicial review of administrative decisions is required but no standard of review is defined in the applicable statute, reviewing courts often determine that the APA standard of review applies as a so-called "gap-filler" even if the APA does not govern the governing body's actions. *N.Y. State Dairy Foods, Inc. v. Northeast Dairy Compact Comm'n*, 26 F. Supp. 2d 249, 260 (D. Mass 1998) (the court was "guided by" "well-settled principles governing the judicial review of an agency's construction of a statute"); *Baltimore v. Susquehhana River Basin Comm'n,* 2000 U.S. Dist. LEXIS 8199, *12 (D. Md. 2000) (decisions made under the APA provide a "helpful analogy" in determining the appropriate scope of judicial review); *Delaware Water Emergency Group v. Hansler,* 536 F. Supp. 26, 27 (E.D. Pa. 1981) (cases decided under the provisions of the APA may "be helpful but not necessarily controlling" as to the scope of judicial review by this court). In such situations, the APA provides a "helpful analogy" and its "well-settled principles" are used to "guide" the court's review. *Id.*

B. Council Decisions Could be Reversed or Remanded for Not Passing Judicial Muster under APA Review Standard

The APA provides that courts reviewing agency decisions shall:

> hold unlawful and set aside agency action, findings, and conclusions found to be (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; (B) contrary to constitutional right, power, privilege or immunity; (C) in excess of statutory jurisdiction, authority or limitations, or short of statutory right; (D) without observance of procedure required by law.

5 U.S.C. §706(2)(A)-(D). This standard of review tends to be highly deferential to the administrative body, and often results in courts upholding the agency's decision. Nevertheless, it is not a rubber stamp of agency decision-making, and even when applied as a gap-filler standard of review for an interstate compact council action, it can result in unfavorable decisions for the council. *See, e.g., Organic Cow v. Northeast Dairy Compact Comm'n,* 46 F. Supp. 2d 298 (D. Vt. 1999) (*"Organic Cow I"*). Without clear procedures that ensure deliberative decision-making, a court may remand an interstate compact council decision and require additional process that may not be tailored to the particular interstate compact council. For instance, a Vermont district court overturned a Northeast Dairy Compact Commission decision as arbitrary and capricious because, among other things, the commission's findings of fact were casual and conclusory and did not provide the court with any information to judge its decision. *Organic Cow I,* 46 F. Supp. 2d at 306. The court noted that:

> [i]t is an axiom of administrative law that an agency's explanation of the basis for its decision must include rational connection between the facts found and the choices made . . . the agency [must] explain the rationale and the factual basis for its decision, even though [courts] show respect for the agency's judgment in both.

Id. at 306-07 (quoting *Bowen v. Am. Hosp. Ass'n,* 476 U.S. 610, 626-27) (1986)). On remand, the commission conducted an extensive hearing, allowing the impacted parties to file briefs and preparing a detailed analysis of its conclusions. *Organic Cow v. Northeast Dairy Compact Comm'n,* 164 F. Supp. 2d 412 (D. Vt. 2001) (*"Organic Cow II"*). Following this additional procedure, the commission decision was upheld by the court. *Id*.

1. The Guidance is Not Binding on the Council

Given the fact that the Guidance has not been promulgated as rules via formal notice-and-comment rulemaking, any action made by the Council under the Guidance is vulnerable to a similar judicial outcome as in *Organic Cow I*. Although the Guidance includes several key components of proper administrative decision-making, including public notice and comment for proposals submitted to the Council for its review and opportunities for public hearing, it is unclear whether the Council will adhere to such provisions given the overarching caveat allowing the Council to deviate from the guidelines at its discretion. *See Great Lakes-St. Lawrence River Basin Water Resources Compact Interim Guidance,* § 200.8. In the absence of certainty surrounding the mechanics and scope of Council decision-making, applicants and other stakeholders are precluded from participating in a meaningful way as contemplated by the Compact. Issuing the Guidance as formal rules after appropriate notice-and-comment procedures would address this concern.

2. The Guidance Does Not Require a Written Record of Decision

Importantly, the Guidance is devoid of a fundamental requirement of administrative decision-making; namely, the Guidance does not obligate the Council to develop a written record in support of any action. The existence of a record of decision is sufficiently critical that its absence will lead to judicial reversal of any Council withdrawal determination. Moreover, the rules and requirements governing the record must be in place at the outset of any withdrawal application. An administrative body cannot cure this essential obligation with a post hoc record of decision with its scope and meaning subject to the discretion of the Council. To the contrary, basic administrative law principles mandate adoption of record rules governing all decisions to ensure for fairness and consistency.

A written record was not only a key focus in the *Organic Cow* decisions, but also in those cases where interstate compact council decisions were ultimately affirmed. *See, e.g., Old Town Trolley Tours of Wash, Inc. v. Wash. Metro. Area Transit Comm'n,* 129 F.3d 201, 206 (D.C. Cir. 1997) (upholding the interstate commission's decision, finding that the commission limited its decision-making to relevant factors, did not consider extraneous factors, and the explanation provided for its action had evidentiary support); *Susquehanna River Basin Comm'n,* 2000 U.S. Dist. LEXIS at *40-41 (upholding the interstate commission's decision, finding that the commission acted well within its authority in issuing the determination and that there was

substantial evidence in the record that supported the decision); *Delaware Water Emergency Group,* 536 F. Supp. at 27 (upholding the group's decision, finding that it was based on a full consideration of facts and circumstances of the case, it was done with deliberation, and the record established that the group complied with all statutory and regulatory requirements). Thus, absent a formal written record, the Council risks not having a clear evidentiary basis for its decisions. If a Council decision is judicially challenged, the absence of a written record would hinder a court's ability to conclude that the decision was not an abuse of Council discretion, and the decision would likely be overturned.

The importance of a written record is underscored by the fact that a Council decision would be considered an agency adjudication under the APA. As such, a court reviewing a Council action would, at a minimum, require that the Council "take whatever steps it needs to provide an explanation that will enable the court to evaluate the agency's rationale at the time of the decision." *See Dickson v. Sect. of Defense,* 68 F.3d 1396, 1404 (7th Cir. 1995) (quoting *Pension Benefit Guar. Corp. v. LTV Corp.,* 496 U.S. 633, 654 (1990) (remanding the agency action for the agency to provide an explanation for its decision). The "agency's explanation must minimally contain a rational connection between the facts found and the choices made." *Dickson,* 68 F.3d at 1404-05 (quoting *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto Ins. Co.,* 460 U.S. 29, 43 (1983)). The current Guidance does not provide for such a reviewable explanation, further jeopardizing the finality of any Council decision.

3. Other Procedural Deficiencies May Make Decision-Making Process More Challenging, Subjective

The Guidance also fails to provide definitions for certain key terms that are undefined in the Compact, including "adverse resource impact," "reasonable water supply alternative," "cumulative impact," "permit requirements for return flow," and "water use plan." These terms are also used in the individual laws of each state implementing the Compact. The Council must assess these criteria in evaluating any application, yet it does not assign any meaning to these terms. Agency definitions are frequently the subject of legal scrutiny and it is not unusual for rulemakings to be overturned because regulatory definitions are determined to be inconsistent with the underlying statute.

Lack of definition prevents applicants and other stakeholders from having a clear understanding of the scope and meaning of these terms during the submission and review process, thereby rendering the Council decision-making process more challenging and subjective. As such, parties may be precluded from making comments, providing information, or otherwise participating in a meaningful way as contemplated by the Compact (and, incidentally the APA). The potential for judicial remand or reversal is even greater here as the Council appears ready to evaluate applications in the absence of any definitions or guidance on fundamental decision-making criteria. Administrative law precludes such a case-by-case approach. To the contrary, the Council is obligated to develop definitions to enable the Council itself,

applicants and the Council members to evaluate their applicability to any withdrawal application. Defining or describing the scope of key terms in the Compact up front would provide more certainty to the review process and could prevent Council decisions from being deemed arbitrary and capricious.

The obligation to define foundational terms is underscored by the consequence of their absence and the resulting chaos and conflict. It appears that the Council intends to allow individual states to define these terms as the Compact process unfolds. To date, few states have chosen to promulgate definitions and very few terms have been defined by those states. Based on our review, it appears that the terms "cumulative impact" and "reasonable water supply" have been defined by six of eight member states. The absence of definitions in the Council's guidance creates a real risk of state definitions that are inconsistent with the Compact. Such an outcome would be in direct conflict with the fact that a congressionally-approved interstate compact, such as the Great Lakes Compact, has the functional status of law and therefore takes precedence over conflicting state laws. *See, e.g., Cuyler v. Adams,* 449 U.S. 433, 438-40 (1981); *see also Delaware River Joint Toll Bridge Comm'n v. Colburn,* 310 U.S. 419, 427 (1940); *West Virginia ex rel Dyer v. Sims,* 341 U.S. 22 (1951). An interstate compact is viewed by the courts as akin to a contract between the party states and thus may not be amended, modified or otherwise altered without the consent of all of the parties. *Aveline v. Penn. Bd. of Probation and Parole,* 729 A.2d 1254, 1257 n.10 (Pa. Commw. Ct. 1999). "Upon entering into an interstate compact, a state effectively surrenders a portion of its sovereignty; the compact governs the relations of the parties with respect to the subject matter of the agreement *and is superior to both prior and subsequent law." C.T. Hellmuth & Assoc. v. Washington Metro. Area Transit Auth.,* 414 F. Supp. 408, 409-10 (D. Md. 1976) (holding that Maryland Freedom of Information Act cannot apply to the interstate compact even if Washington, D.C. and Virginia have similar laws). This is at least in part because of the fact that each state's laws reflect policy decisions, and no matter how similar each state's laws are, one party state may not impose its preferences upon the other party states. *Id.* at 410.

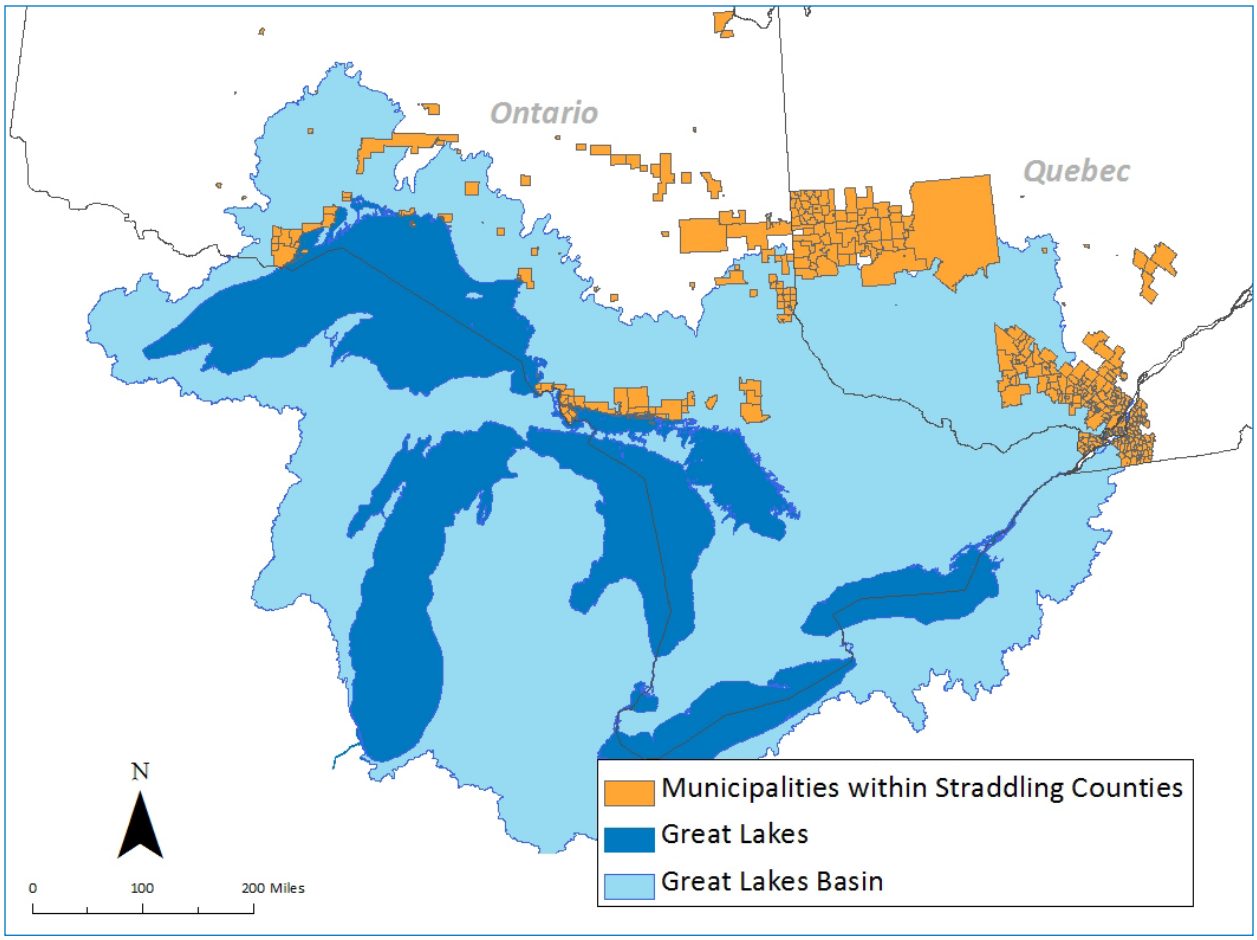
In the likely event that regional consensus on a rule defining these terms is not possible, we note that the Regional Body is required to establish findings of fact (the "Declaration of Finding") during the regional review of a diversion application. This is also an opportunity to minimize uncertainty over the Council's definition of these foundational terms. We encourage the Council to approach the creation of the Declaration of Finding with the utmost diligence and attention, as the declaration of finding may become the de facto definition of these terms of art.

III. Conclusions

A legal challenge to a Council decision regarding a diversion application may result in unexpected or unwanted changes to the administrative requirements of the Compact. The Council can address these concerns by adopting formal rules and procedures in accordance with notice-and-comment rulemaking procedures. In the absence of certainty regarding the mechanics and scope of Council decision-making, stakeholders will be precluded from

participating in a meaningful way as envisioned by the Compact. Moreover, a Council decision remains vulnerable to reversal or remand if additional definitions and requirements for a written record are not added as part of the rulemaking process.

Canadian Provinces



The Canadian provinces of Quebec and Ontario ringing the northern half of the Great Lakes are not obligated to abide by the compact, but it is worth noting their status in regard to potential diversions and regulatory fitness. Both provinces are partners with the eight Great Lake states in the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement. The agreement was signed in 2005 by the premiers of Ontario and Quebec along with the Great Lakes governors. The non-binding agreement provides a framework for crafting policies that address issues such as water management and conservation, water use and demand, water diversions, and the possible threat of climate change and its effects on the Great Lakes.[21]

Quebec

Quebec has taken a number of regulatory steps to comply with the agreement. Most recently, it enacted a regulation under its Environment Quality Act providing for implementation of the agreement through withdrawal accountability mechanisms, such as permits. In addition,

21 Shultz, P. (2011). Great Lakes Water Agreements. In P.H. Gleick, The World's Water Volume 7 (pp. 165-170). Oakland: Island Press

it has formally adopted 15 water conservation and efficiency objectives and is currently in the process of identifying the measures that will enable it to meet these objectives. These measures — designed to conserve limited water resources – will be increasingly important as the populations just outside the basin grow and potential demand for Great Lakes-St. Lawrence River water grows with them.

According to Canada's 2011 census, the vast majority of population growth in the Montreal area is in the surrounding municipalities. Municipalities such as Saint Columban (population 13,744), Sainte Sophie (population 14,014), Prevost (population 12,719), Saint Lin-Laurentides (population 18,324) and Saint Julienne (population 9,652) have seen the greatest growth (73.9 percent, 49.2 percent, 41.9 percent, 41.1 percent and 29.9 percent, respectively). These growing communities and many of their counterparts rely on groundwater for their drinking water supply, which may not be adequate to meet the increased long-term demand. Thus, connecting to suppliers of Great Lakes Basin water may become an option for satisfying this demand. Because Quebec is not bound by the compact, diversions from the St. Lawrence River would not be subject to the compact's application requirements, but would still be subject to regional review. However, in enacting regulations to implement the agreement, Quebec has banned new or increased diversions from the basin with limited exceptions for public water supplies in communities near the basin. How, within the scope of its own regulations, Quebec determines whether to make these exceptions — and for whom — will be a significant question for the Canadian side of the Great Lakes.

Ontario

Ontario has fulfilled several of its agreement commitments and is still in the process of completing others. To date, Ontario has implemented a statute to ban diversions out of the basin, submitted its first Water Management and Conservation Program Report to the Regional Body in 2009, and in 2010 passed the Water Opportunities and Water Conservation Act, an act that supports agreement conservation commitments. Ontario has not ratified the limits on intrabasin transfers under the agreement and therefore is still bound by the weaker 2001 Annex to the Great Lakes Charter.

Conclusion

The communities discussed in this report surround the U.S. side of the Great Lakes; consequently, their water needs may directly affect the Great Lakes. While the compact protects the Great Lakes from many out-of-basin diversions, an exception to the ban is granted to straddling communities and communities within straddling counties if they are able to meet certain criteria. As the communities listed in this report are either straddling communities or communities located within straddling counties, Great Lakes water is a potential option if they experience water shortages or poor water quality, and meet the criteria outlined in the compact. This report is intended to inform the Great Lakes states and their water resources departments, local governments and municipalities of straddling communities and straddling counties, organizations invested in Great Lakes protection, and the general public about the compact's importance and function.

With the precedent-setting Waukesha, Wis. application for Great Lakes water nearly on the table, we believe that the implementation procedures for the landmark compact developed to protect that water need improvement. As more communities begin to experience water quality problems and water shortages, the pressure to identify additional sources of water will rise. Indeed, the compact's role in Great Lakes protection will become even more crucial as communities surrounding the Great Lakes seek out these additional water resources. We believe the Compact Council can do a better job of preparing for the application process in a way that will sustain the compact for decades.

Great Lakes water is clean and abundant. Yet the lakes are finite and their waters are vulnerable to many stressors. The compact is a crucial, history-making set of laws crafted to protect these waters, and it is vital that all Great Lakes states and lawmakers work toward a strong, protective compact that ensures a vast, yet limited supply of water for the region and the ages.

About the Author

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ALLIANCE FOR THE GREAT LAKES

ENSURING A LIVING RESOURCE FOR ALL GENERATIONS

About Alliance for the Great Lakes

Alliance for the Great Lakes serves as the voice of the 40 million people who rely on Great Lakes water for drinking, recreation and commerce. Formed in 1970, it is the oldest independent Great Lakes protection organization in North America. Its mission is to conserve and restore the world's largest freshwater resource using policy, education and local efforts, ensuring a healthy Great Lakes and clean water for generations of people and wildlife. Its headquarters are in Chicago, with offices in Buffalo, Cleveland, Detroit, Grand Haven and Milwaukee.

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